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FIRST NAMED INVENTOR APPLICATION NO. FILING DATE ATTORNEY DOCKET NO. CONFIRMATION NO. 10/644,570 08/20/2003 TNT-114US Aaron Fisher 6637 **EXAMINER** 23122 7590 02/15/2006 **RATNERPRESTIA** HUGHES, DEANDRA M P O BOX 980 ART UNIT PAPER NUMBER VALLEY FORGE, PA 19482-0980 3663

DATE MAILED: 02/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/644,570	FISHER, AARON
	Examiner	Art Unit
	Deandra M. Hughes	3663
The MAILING DATE of this communication appears on the cover sheet with the correspondence address		
Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1)⊠ Responsive to communication(s) filed on <u>12 December 2005</u> .		
· ·	s action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4)⊠ Claim(s) <u>1-9,11 and 12</u> is/are pending in the application.		
4a) Of the above claim(s) 11 and 12 is/are withdrawn from consideration.		
5)⊠ Claim(s) <u>3</u> is/are allowed.		
6)⊠ Claim(s) <u>1 and 4-9</u> is/are rejected.		
7) Claim(s) <u>2</u> is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
9) The specification is objected to by the Examiner.		
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).		
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 		
Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this National Stage		
application from the International Bureau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list of the certified copies not received.		
Attachment(s)		
1) Notice of References Cited (PTO-892)	4) Interview Summary	
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 	Paper No(s)/Mail Da 5) Notice of Informal P	ite atent Application (PTO-152)
Paper No(s)/Mail Date	6) Other:	•

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DETAILED ACTION

Election/Restrictions

1. Applicant's argument regarding the election without traverse of claims 1-7 in the reply filed on 12/12/05 is persuasive (pg. 7, 1st paragraph). Consequently, claims 8-9 are <u>no longer withdrawn</u> from consideration. Consequently, claims 1-9 are examined in this office action.

Claim Rejections - 35 USC § 102

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. Claims 1, 4-5, and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Welch (US 5,536,571 published Jul. 23, 1996).

**The references made herein are done so for the convenience of the applicant.

The prior art should be considered in its entirety.

With regard to claim 1, Welch discloses:

- a substrate (figs. 1-2; #9; col. 4, line 51);
- a SOA (#19) coupled to the substrate and including the amplifier anode (f#41 with Ipre) electrode and an amplifier cathode (#43) electrode;
- a semiconductor laser (#11), coupled to the substrate and including a semiconductor laser anode electrode (#41 with I_t) and a semiconductor laser cathode electrode (#43), wherein:

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the semiconductor laser and the SOA are configured on the substrate so that the laser is optically coupled to the SOA (fig. 1, #11 is optically coupled to #19); and

at least one of the semiconductor laser anode electrode and semiconductor laser cathode (fig. 2, section #11 of #43) is electrically coupled to at least one of the amplifier anode electrode and amplifier cathode (fig. 2, section #19 of #43 is electrically coupled to the #11 section of #43) such that the semiconductor laser and the SOA are electrically connected in series (the said sections are connected serially).

With regard to claims 4 and 7, the cathode and the anode are connected electrically via the semiconductor material of the apparatus.

With regard to claims 5 and 8, any one of the anodes labeled #41 of fig. 2 can be considered to be electrically coupled in parallel.

Claim Rejections - 35 USC § 103

4. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welch (US 5,536,571 published Jul. 23, 1996) in view of Johnson et al. (Basic Circuit Analysis, 1986).

Welch does not specifically disclose that the electronic component includes a resistor. However, Johnson teaches, as it is well known in the art, the use of a resistor in an electrical circuit (pgs. 19-24). It would have been obvious to one of ordinary skill (e.g., an optical engineer) in the art at the time the invention was made to use a resistor

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in the circuit to provide current to the amplifier/laser device for the advantage of preventing an electrical short.

Allowable Subject Matter

- 5. Claim 3 is allowed.
- 6. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With regard to claim 2, the following is a statement of reasons for the indication of allowable subject matter. The prior art does not teach or make obvious a EML package with a 1st electrical contact electrically coupled to at least one of the anode electrode of the SOA or the anode electrode of the semiconductor laser and a 2nd electrical contact electrically coupled to at least one of the cathode electrode of the SOA or the cathode electrode of the semiconductor laser.

Conclusion

7. Although this new grounds of rejection was necessitated by amendment, the Examiner made an error in her non-final office action where she rejected over Yokoyama (US 6,323,507) but referenced Abeles (US 6,445,724). See applicant's arguments filed 12/12/05, paragraph 2, page 7. However, applicant nonetheless responded to the Abeles references and made a sincere attempt to put the application in condition for allowance. Consequently, this action is non-final.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deandra M. Hughes whose telephone number is 571-272-6982. The examiner can normally be reached on M-F, 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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